

State Of Wisconsin DIVISION OF HEARINGS AND APPEALS

In the Matter of the Wisconsin Pollution Discharge Elimination System Permit No. WI-0061514-03-0 (WPDES Permit) Issued to United Liquid Waste Recycling, Inc., Clyman, Dodge County, WI

Case No. DNR-14-061

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

On March 23, 2015 the Department of Natural Resources (Department or DNR) filed a Request for Hearing with the Division of Hearings and Appeals. Pursuant to due notice, hearing was held at Madison, Wisconsin on February 22 to February 24, 2016, Rebecca J. Vahle, Administrative Law Judge (ALJ) presiding.

The parties requested an opportunity to submit written closing arguments, and the last was received on May 31, 2016 in a letter from United. Stipulations on deposition testimony admitted into the record were received on June 2, 2016. In accordance with Wis. Stat. §§ 227.47 and 227.53(1)(c) the Parties to this proceeding are certified as follows:

United Liquid Waste Recycling, Inc. (United or ULWR), by

Attorney Amy B.F. Tutwiler Attorney David E. McFarlane Bell, Moore & Richter, S.C. 345 W. Washington Ave., Suite 302 Madison, WI 53703-3007

Wisconsin Department of Natural Resources (Department or DNR), by

Attorney Judith M. Mills Attorney Robin T. Nyffeler DNR – Legal Services PO Box 7921 Madison, WI 53707-7921

SUMMARY OF ISSUES AND DECISION

The Department of Natural Resources (Department or DNR) reissued Wisconsin Pollution Discharge Elimination System (WPDES) Permit No WI-0061514-03-0 (Permit) to United Liquid Waste Recycling, Inc. (United) effective July 1, 2014 that includes discharge limits, monitoring requirements, or both, for nitrogen, chlorides, pH, chemical oxygen demand and metals at disputed Outfalls. (Issues #1-#7) The same Permit includes compliance maintenance annual reporting (CMAR), bypass restrictions and reporting requirements for United's wastewater treatment system and a restriction that limits certain fields to a single municipal client. (Issues #8-#10)

An overarching question in the many of these presented issues is whether United's waste is regulated by Wis. Admin. Code Ch. NR 214 "Land Treatment of Industrial Liquid Wastes, By-Product Solids and Sludges" or Wis. Admin. Code Ch. NR 204 "Domestic Sewage Sludge Management" or both.

Statement of Issues

The issues for which the hearing was granted pursuant to Wis. Stat. § 283.63 are as follows:

- 1. Are the nitrogen loading limits on the land application of mixed wastes (industrial wastewater and municipal biosolids), established in section 3.3.3.4 (Outfall 030), Section 3.3.5.4 (Outfall 111), Section 3.3.7.4 (Outfalls 51 and 110), Section 3.3.8.5 (Outfalls 101, 102 and 103) and Section 5.3.10.2, authorized and reasonable?
- 2. Is the nitrogen requirement in section 3.3.11.10 (Outfall 221) of the permit authorized and reasonable?
- 3. Are the chloride loading limits on the land application of mixed wastes (industrial wastewater and municipal biosolids), established in Section 3.3.5.5 (Outfall 030), Section 3.3.5.5 (Outfall 111), Section 3.3.7.5 (Outfalls 51 & 110) and Section 3.3.8.6 (Outfalls 101, 102 and 103), authorized and reasonable?
- 4. Are the chloride monitoring requirements on mixed wastes (industrial wastewater and municipal biosolids), established in Section 3.3.3 (Outfall 030), Section 3.3.5 (Outfall 111), Section 3.3.7 (Outfalls 51 and 110) and Section 3.3.8 (Outfalls 101, 102 and 103), authorized and reasonable?
- 5. Are the monitoring requirements for chemical oxygen demand (COD) on mixed wastes (industrial wastewater and municipal biosolids), established in Sections 3.3.3 (Outfall 30) and 3.3.8 (Outfalls 101, 102 and 103) authorized and reasonable?

- 6. Are the pH monitoring requirements on mixed wastes (industrial wastewater and municipal biosolids), established in Sections 3.3.3 (Outfall 30), 3.3.5 (Outfall 111), 3.3.6 (Outfall 112), 3.3.7 (Outfalls 51 and 110), 3.3.8 (Outfalls 101-103), 3.3.9 (Outfall 113) and 3.3.10 (Outfall 220), authorized and reasonable?
- 7. Are the metals monitoring requirements on industrial cake sludge, established in Section 3.3.4 (Outfalls 50 and 109), authorized and reasonable?
- 8. Are the compliance maintenance annual reporting (CMAR) requirements in Section 5.1.5 of the permit reasonable and necessary?
- 9. Are the bypass restrictions and reporting requirements on ULWR's (United's) wastewater treatment system in Sections 5.2.2 and 5.2.3 authorized and reasonable?
- 10. Is the restriction in Section 3.3.10.2 that limits certain fields to a single municipal client authorized and reasonable?

Summary of Decision

The Department is explicitly required or explicitly permitted to include the disputed Permit terms in Issues #1-#10. United did not prove by a preponderance of the evidence that disputed Permit terms #1, and #3-#10 are unreasonable or unnecessary. United did show that the disputed Permit terms in #2 are unreasonable.

FINDINGS OF FACT

- ¶1. United is headquartered in Clyman, Wisconsin (Dodge County) where it has two properties, one that is referred to by the Department as its Main facility and the other as its CL facility. Clyman provides short term storage and land application of industrial waste from industrial clients; septage from residential, commercial and industrial clients; and municipal sewage sludge.
- ¶2. The United Main facility consists of an open lagoon referred to as "Big Pond¹"; two below-ground lagoons referred to L1 and L2²; a cake storage pad in Building #1; four above-ground holding tanks (H1-H4) and a beverage crush station or recycling room. The two smallest storage facilities by volume are H3 and H4 with a combined storage capacity of 215,000 gallons. Both of these storage facilities contain only municipal sewage sludge and are the only storage facilities used by United to exclusively store municipal sewage sludge waste. United did not report direct discharge from these tanks (Outfall 29) from 2009-2014. (Exhibits 101)

¹ The Big Pond has a capacity of approximately 18,000,000 gallons.

² L1 and L2 are alternatively referred to as the North Lagoon and South Lagoon in the Permit.

- ¶3. Municipal waste from H3 and H4 was comingled with industrial wastes and discharged through Outfall 30. (Exhibits 101 and 110) Several liquid industrial waste storage units are permitted to be discharged through Outfall 30, including H1 (2,000,000 gallons), H2 (2,000,000 gallons), L1 (3,500,000 gallons) and L2 (3,500,000 gallons). The United Clyman facility consists of cake storage pads and two above-ground holding tanks (CL1-CL2) (Exhibit 102).
- ¶4. United does not use a mechanical treatment plant to treat industrial waste received at its facility (Hegeman Pre-filed, p. 14) Some of the industrial wastes may have been generated from some sort of limited treatment before arriving at United. Sometimes the pre-treatment process results in sludge that has concentrations of pollutants too high for discharge at a municipal facility and those are accepted by United. (Transcript, pp. 156-157)
- ¶5. United's land application of these wastes is regulated by a Wisconsin Pollution Discharge Elimination System Permit (WPDES), specifically under reissued WPDES permit No. WI-0061514-03-0 dated July 1, 2014, expiring June 30, 2019 (Permit). (Exhibit 20, Exhibit 125) WPDES permits include conditions related to land treatment system design and operation in order to protect "waters of the state³."
- ¶6. The disputed monitoring and loading limits (Issues #1-#7) were included for mixed industrial and municipal waste Outfalls (Outfalls 001, 012 and 020) in United's WPDES Permit effective from November 1, 2007 to September 30, 2012. (Exhibit 23, Transcript, pp. 230-233) United opted not to mix municipal waste with the industrial waste at those Outfalls during that permit period but it had the option to do so and it did not contest that if it had the now contested monitoring and loading limits would have applied.
- ¶7. United predominantly stores and land applies food processing wastes which are wastes explicitly regulated by Wis. Admin. Code Ch. NR 214. The provisions of Ch. NR 214 apply to to waste which "include, <u>but are not limited</u> to liquid wastes (wastewater), by-product solids and sludge generated by: fruit and vegetable processing operations, dairy products processing operations, meat, fish and poultry products processing, mink raising operations, aquaculture, commercial laundromat and motor vehicle cleaning operations and any other industrial, commercial or agricultural operations." §§ NR 214.02 (<u>emphasis added</u>), NR 214.03. (Hegeman Pre-filed, p. 3)

³ Wis. Stat. § 283.01(2) defines "waters of the state" as those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems and other surface water or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained upon the property of a person.

- ¶8. Municipal sewage sludge (municipal waste) means the solid, semi-solid or liquid residue generated during the treatment of domestic sewage in a treatment works. It includes scum or solids removed in primary, secondary or advanced wastewater treatment processes and material derived from sewage sludge. It contains human or other pathogens and before land applying must meet pathogens and vector reduction requirements. Wis. Admin. Code § NR 204.04(55). (Hegeman Pre-filed, p. 3)
- ¶9. Septage grade wastes are the wastewater or contents of a septic tank, holding tank, grease interceptor, portable restroom or similar device. Wis. Admin. Code § NR 113.03(55). (Hegeman Pre-filed, p. 3)
- ¶10. The Permit currently includes requirements for the equivalent of 76 separate sources that provide varying types of waste. United has 69 clients (some with multiple Outfalls) and 3 internal sources including the canning room, leachate collection and the septage storage facilities. (Exhibit 20, Exhibit 125, Exhibit 129, Hegeman Pre-filed, p. 6)
- ¶11. United's client list in 2014 consisted of 10 clients who produce primarily municipal sewage sludge waste and 59 clients who produce primarily industrial waste. The number of United's clients, the volume of wastes and the relative volume of different wastes can vary over time. (Exhibit 129)
- ¶12. United's submitted and certified records to the Department show that during the time period from January 1, 2011 to March 31, 2015, United land applied approximately 101,363,400 gallons of wastewater from 57 actively discharging clients. This averages out to about 25,340,871 gallons per year. In 2015 United estimates that it handled approximately 50,000,000 gallons so nearly twice the average of the period from 2011 to early 2015. (Transcript, p. 213)
- ¶13. United's submitted and certified records to the Department demonstrates that over 80% of its clients are industrial waste producers and approximately 96.8% of its influent liquid waste was classified as industrial from January 1, 2011 to March 31, 2015. (Hegeman Pre-filed, p. 7; Warrner Pre-filed, p. 7)
- ¶14. United requested and was granted the flexibility under its Permit to co-mingle or mix different waste types at varying percentages. There is no restriction on the percentage of industrial waste wastewater allowed in a mixture. Mixing wastes does not remove contaminants from the mix. (Hegeman Pre-Filed, p. 9, p. 29)
- ¶15. Outfalls are locations or storage structures where representative samples of waste are collected before the waste is land applied. Samples must be representative of the waste that is being land applied. Some of the Outfalls are for municipal waste, some are only for industrial

waste and some allow for waste types to be mixed before land application. United has permission to use 22 Outfalls. (Hegeman Pre-filed, p. 8)

- ¶16. In 2008 United applied approximately 85% of its waste from segregated waste Outfalls and 15% from mixed waste Outfalls. In contrast, United applied approximately 12.4% of its waste from segregated waste Outfalls and 87.6% from mixed waste Outfalls (primarily Outfalls 030 and 101) in 2014. (Exhibit 132)
- ¶17. Between 2009 and 2014, the majority of United's waste was land applied at Outfalls 30 and 101. (Hegeman Pre-filed, p 8, Exhibit 108, Exhibits 130-132) Outfall 30 was not approved for industrial wastewater until its current Permit. It was previously approved only for "municipal sludge from H3, storage pad or thickener." (Exhibit 23, p. 5) It was not approved for industrial wastewater from H2. (Exhibits 44-45)
- ¶18. Chloride limits are not typically imposed on municipal sewage sludge that are land applied because chlorides do not accumulate or concentrate in sewage sludge but remain in the water with most chloride being discharged in the effluent. (Hegeman Pre-filed, p. 13)
- ¶19. Municipal bio-solids or municipal waste has been subjected to multiple phases of treatment which stabilizes the waste and the nitrogen concentrations and type of nitrogen in the municipal waste is generally consistent. Industrial waste is generally not subject to multiple treatment processes, is not stabilized before land application and the nitrogen concentrations and types vary between industries. Thus there is a standard mineralization rate for municipal waste but that standard mineralization rate for nitrogen is not appropriate for industrial waste or industrial waste mixed with municipal waste. (Hegeman, Pre-filed, pp. 10-16, Transcript, pp. 386-392)
- ¶20. Nitrogen and chlorides are usually present in industrial waste including food processing waste. Nitrogen is often a component of the raw materials and process chemicals used in industrial production. Nitric Acid is also used in industrial processes including cleaning of industrial equipment. Chloride salts are used as raw materials in a variety of industrial processes. Sodium chloride is found in brines used to produce products such as cheese and food flavoring and is used to soften water used in industrial processes. Hydrochloric acid use in industrial facilities results in chloride in the wastewater and other salts of chloride such as potassium chloride may be used as raw materials in industrial processes. (Brauer Pre-filed, pp. 6-7)
- ¶21. Nitrogen and chloride each have a groundwater quality standard in NR 140. Monitoring nitrogen and chloride at Outfalls documents the concentrations of these pollutants in the wastewater so that they are not applied to soil in concentrations that will result in leaching to groundwater and exceedances of the groundwater standards. (Brauer, Pre-filed p. 10)

- ¶22. There are different forms of nitrogen in industrial waste. Total Kjeldahl nitrogen (TKN) is the measure of the total concentration of organic nitrogen and ammonia. Nitrogen that is land applied usually exists in the ammonia or organic form. After application, the organic form may be converted to the ammonia form which may then be converted to nitrate nitrogen. (Hegeman Pre-filed, p. 15)
- ¶23. Nitrate nitrogen is very mobile in the subsurface and it has potentially serious health effects if it pollutes groundwater and drinking water, including methemoglobinemia ("blue baby syndrome") in infants. Nitrogen from organic nitrogen is slowly released over time through mineralization. The availability of organic nitrogen for plant uptake is based on the mineralization rates for a particular waste. Ammonia nitrogen is available for plant uptake almost immediately. (Phelps Pre-filed, pp. 9-12)
- ¶24. Monitoring for nitrogen at the Outfalls would track compliance with the loading limit of 165 pounds per acre per year (lbs/acre/yr). The loading limit is based on preventing nitrogen, in nitrate form, from leaching to groundwater. The 165 lbs/acre/year standard is based on amount of nitrogen the cover crop needs minus any other nitrogen including fertilizer or manure added to the landspreading site. (Hegeman Pre-filed, pp.4-5, 17) Nitrogen that that exceeds the needs of the cover crops results in nitrogen loss. In the case of impermeable soil this can result in surface water contamination and eutrophication. In the case of permeable soil this can result in groundwater contamination. (Hegeman Pre-filed, p. 5 ¶11-15)
- ¶25. The mineralization rate set for municipal sewerage sludge in Wis. Admin Code § NR 204.07(8) is not valid for a waste mixture that is mostly industrial waste. Sewage sludge from a municipal sewage treatment plant has gone through a treatment process, has been stabilized and has fairly uniform mineralization rates. Industrial wastes are not biologically treated and stabilized. There is significant variability in the organic nitrogen release rate from the decomposition of industrial waste when applied to agricultural sites. This variability, lack of treatment and stabilization is the basis for the Department using a nitrogen loading limit based on all of the nitrogen in industrial waste being available for crops within the first year it is applied. (Hegeman Pre-filed, pp.15-17)
- ¶26. United could perform a mineralization study to estimate a mineralization rate for the waste discharged at mixed waste Outfalls and propose that standard for nitrogen loading limits. It could also have proposed a different analytical method for measuring nitrogen. (Hegeman Prefiled, p. 19)
- ¶27. The preventative Action Limit (PAL) for nitrates in groundwater is 2 mg/L and the Enforcement Standard (ES) is 10 mg/L. Wis. Admin. Code § NR 140. (Phelps Pre-filed, p. 9)

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PALs are used by the Department as design and management practice criteria for regulated practices and activities that may impact groundwater. They represent the level of contamination at which response actions may be required to prevent new releases of a substance or to restore impacted groundwater quality. ES's represent the level of contamination at which the Department requires response actions by a regulated entity to minimize the concentration of the contaminant in groundwater. They are also used to achieve compliance at applicable facility "points of standard application." (Phelps Pre-filed, p. 10)

- ¶28. Chloride is highly mobile in the subsurface, leaches through the unsaturated soil zone and can contaminate groundwater. The PAL for of chloride is 125 mg/L and the ES is 250 mg/L. Chloride is monitored to meet the limits of 170 pounds per acre per year (lbs/acre/yr) or 340 lbs/acre/2yrs) as prescribed in Wis. Admin. Code § 214.17(4)(d). (Hegeman Pre-filed, p.4)
- ¶29. Chemical oxygen demand (COD) measures the total quantity of oxygen required to oxidize all organic material in a sample into carbon dioxide and water. Due to soil bacteria activity, a significantly high organic load (high COD) can alter the geochemical oxidation reduction potential in groundwater below a land application (treatment) site. Low available oxygen in groundwater can result in the mobilization of substances naturally present in aquifer soil and rock. Substances such as iron, manganese, arsenic and nickel which can potentially cause significant adverse health or aesthetic impacts on groundwater. COD is often used in place of Biological Oxygen Demand (BOD₅) because BOD₅ requires a 5 day turn-around time to get lab results whereas COD results are often available the next day. COD is usually less expensive than BOD₅ testing. BOD₅ measures the amount of oxygen that bacteria will consume while decomposing organic matter under aerobic conditions in a sample, estimated over a period of 5 days. COD does not differentiate between biologically available and inert organic matter. Both tests inform whether a sample has a high organic load that could result in low available oxygen in groundwater. (Phelps Pre-filed pp. 16-18)
- ¶30. pH is the measure of the hydrogen ion concentration of a solution and effectively measures how acidic or basic (corrosive) is the wastewater. pH affects the mobility and transport of certain pollutants, such as metals that are present in the land-spread waste or those naturally occurring in the subsurface, in groundwater. When pH drops and/or metals concentrations in soil exceed a certain level, metals can be taken up by plants. This is a public health concern. (Warrner Pre-filed, p. 39, Phelps Pre-filed, p. 19)
- ¶31. Metals monitoring is required for municipal sewage sludge under §§ NR 204.06 and 204.07 Wis. Admin. Code. It is allowed for under Wis. Admin Code § NR 214.18(5)(b) if there is a concern that metals may be present in industrial cake sludge. The contested metals sampling points (Outfalls 50 and 109) is for mixed industrial cake sludge and not liquid industrial waste. The industrial cake sludge at these points may also be mixed with municipal cake sludge. United

did not want a permit terms that restricted this to only industrial cake sludge. (Transcript, pp. 234-235) Metals typically accumulate in solids, especially dewatered sludge and cake sludge. (Hegeman Pre-filed, p. 43) United has accepted non-food grade industrial cake sludge in the past and may receive such waste again in the future. The non-food grade industrial cake sludge waste previously accepted by United (Client #85) in 2010 did not have concentrations of tested metals that were concerning. (Transcript, p. 194, Exhibit 83)

- ¶32. When metals exceed specific concentrations, they can be taken up by plants and then eaten by humans or animals creating a public health concern. Metals can also leach into groundwater after being landspread if present in United's industrial cake sludge waste. Each of the metals to be tested has a corresponding public health related groundwater standard under Wis. Admin. Code § NR 140, Table 1. Arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium and zinc all have an enforcement standard (ES) and preventative action limit (PAL). United is not currently using the contested outfalls because it mixes all of its industrial cake sludge with municipal sludge and discharges through Outfall 51 or 101 but United has the flexibility in its Permit to use these outfalls and that is when the metals testing requirement would be triggered. (Transcript, p. 189)
- ¶33. The compliance maintenance annual report (CMAR) is a tool to review the previous year's practices, to identify shortcomings and to determine how past performance may affect the future such as changing the Land Application Management Plan to reflect lessons learned. (Hegeman Pre-filed, p. 36) Because United is a private land application permittee, only three of the eight sections in the CMAR apply and that it what is required in 5.1.5 of the Permit. The requirements in the CMAR are not redundant to the Land Application Management Plan as the focus of the CMAR is to address any shortcomings at the facility moving forward. (Hegeman Pre-filed, p. 38)
- ¶34. The bypass restrictions and reporting requirements in 5.2.2 and 5.2.3 of the Permit are included to address a proposed wastewater treatment plant that is not currently operational but that United could begin operating during the Permit term. Bypass restrictions and reporting are required under Wis. Admin. Code § 205.07(1)(u) in all WPDES permits where a wastewater treatment plan is operating. These restrictions and reporting requirements will not apply to United until it begin operation of its treatment plant. (Hegeman Pre-filed, p. 39)
- ¶35. Cumulative loading of metals and nitrogen over a period of years may cause exceedances of groundwater standards under Wis. Admin. Code Ch. NR 140. (Warrner Pre-filed, p. 41) Monitoring for cumulative loading of metals and nitrogen becomes impracticable to track when a permitted facility adds waste from multiple municipal clients to the same field. (Warrner Pre-filed, p. 43)

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¶36. In October 2007 the Department issued a White Paper guidance entitled Industrial Wastewater Land Application (White Paper). A White Paper is typically a government report giving information or proposals on an issue, it is not controlling law. The White Paper states that "if there is land application of a combination of wastes, the most restrictive of applicable regulations are typically imposed." (Exhibit 1, p. 2) On a separate page of the White Paper under the heading Contract Land Application, it reads:

The WPDES permits for Contractors handling only industrial wastes are based on the applicable sections of NR 214. The permits place restrictions on the sites which may be used and limit the nitrogen, chloride, and hydraulic loading. If municipal bio-solids are co-mingled with the industrial wastes, restrictions and limits based on NR 204 are also included. If there are any bio-solids in a mixture, the entire mixture must conform with the requirements of NR 204. The more restrictive requirements of NR 214 or NR 204 are controlling. (Exhibit 1, p. 14)

- ¶37. The WPDES regulator for United generally relied on the 2007 White Paper when drafting United's Permit but ultimately looked to the different codes as his reference point. (Transcript, p. 143) Department staff is instructed to consider which requirements in Wis. Admin. Code §§ NR 204 and NR 214 should apply when drafting WPDES permits for waste haulers landspreading co-mingled industrial and municipal waste. (Transcript, pp. 448-449)
- ¶38. Based on the comparison chart supplied by United in its Post Hearing Brief and my review of those permits cited by United, of the six WPDES permits (including United's) reviewed for waste haulers in Wisconsin⁴ who also land apply co-mingled industrial and municipal wastes the following are true: two had the NR 214 standard for nitrogen loading, three had a loading limit for chloride, five had a monitoring requirement for chloride, two had a monitoring requirement for chemical oxygen demand (COD), four had a monitoring requirement for pH and all had a requirement for metals monitoring and limits. United's Permit includes each of these provisions.
- ¶39. Based on the record, of the six WPDES permits covered in the comparison chart, United and Badger State Waste, LLC (Badger) have the most similar waste types and volumes. The Badger permit has all of the same requirements contested here by United (including the CMAR, bypass restrictions and limits on certain fields to single municipal clients). (Exhibits 6 and 20)
- ¶40. United has approximately 15,000 acres approved for landspreading. United currently uses substantially fewer fields than those approved and it has not maintained relationships with some of the property owners. Many acres of approved landspreading sites are owned by persons associated with United. (Transcript, p. 349). The quantity of complaints associated with its

⁴ A-1 Advanced Pumping, Arcade Pumping, Badger State Waste LLC, Bill's Pumping Service, Walter & Sons and United's own Permit. (Exhibits 2-9 and 20-22)

landspreading has fallen since it stopped using fields in the Fox Lake area. (Transcript, p. 175-176, 180)

- ¶41. Landspreading of non-hazardous wastes, if properly applied, can provide a significant benefit as fertilizer and soil conditioner. It can also provide a financial savings when compared to mechanical treatment systems or landfilling. (Exhibit 1, p. 2) It is considered the best way to dispose of municipal and industrial non-hazardous wastes. (Transcript, p. 721)
- ¶42. United's previous Department assigned regulator from approximately 2007 to 2010 was Mr. Ken Denow. (Transcript, p 603) The President of United testified that he understood Mr. Denow's advice in 2008 to be that United should mix its industrial and municipal waste so that it was subject to only Wis. Admin. Code § NR 204 standards. (Transcript, p. 348) Mr. Denow denied telling Mr. Tracy, Jr. this advice. (Transcript, p. 603) Mr. Denow is now employed by Badger which is a competitor for United and Badger has not contested that both Wis. Admin Code Chs. 204 and 214 standards apply to its mixed waste. (Transcript, p. 605)
- ¶43. The advice United understood from its DNR regulator in 2008 is contradictory to the 2007 permit terms which regulated municipal waste mixed with industrial waste under both Wis. Admin. Code Chs. 204 and 214. (Exhibit 23) United did not contest the relevant 2007 permit terms.
- ¶44. The cost of implementing the disputed monitoring requirements would be comparable with United's current sampling at Outfalls 51 and 110 which is approximately \$1,080/quarter except that United testified that it was not currently using Outfalls 50 and 109 so the cost of metals monitoring (\$415.00 of the \$1,080) would not be incurred unless it started using them. (Transcript, p. 200-201, Exhibits 50-51, Transcript, p. 189)
- ¶45. At Outfall 30 the added cost of chloride analysis for a year would be approximately \$624.00 (weekly sampling at \$12.00 per sample). (Exhibit 50, Transcript, p. 237-283). United predominantly uses Outfalls 30 and 101 so it would likely incur these costs at both these Outfalls. The other Outfalls are not used regularly and chloride sampling and analysis is only required when they are in use. United was charged \$16.00 per sample for COD and \$8.00 per sample for pH in January 2016. (Exhibit 50)
- ¶46. United was aware as early as 2007 that if it chose to mix municipal and industrial wastes before landspreading it would need to collect and analyze the waste weekly for COD, pH, and chloride the same monitoring requirements it now disputes in Issues #4-#6. (Exhibit 23) United was also aware as early as 2007 that under those conditions it would need to comply with the TKN and chloride loading limits it now disputes in Issues #1 and #3. (Id.)

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- ¶47. The cost of implementing the contested terms in #1, #3-#10 is reasonable and United would unfairly benefit from the savings relative to its competitors handling similar wastes by similar processes if it did not implement these terms. There is no additional cost for the metals sampling in #7 unless United begins using Outfalls 50 and 109 in which case it would be approximately \$415 per quarter when the Outfalls were in use. (Exhibit 20, Exhibit 51)
- ¶48. United may incur additional transportation and labor costs to implement the terms contested in Issues #1 and #3. It sought and received approval for over 15,000 acres for landspreading, it has not demonstrated that it would need more than these approved acres to satisfy the loading limits and it was aware of the applicable loading limits as early as 2007. Many of the properties used for landspreading or approved for landspreading by the DNR are owned by people associated with United. (Transcript, p. 354) If United let some relationships lapse with landowners, even after the same loading limits in its November 2007 WPDES Permit, that is not now a basis for finding the loading limits unreasonable. (Exhibit 23) Badger, a competitor similar to United in quantity and type of wastes it handles is subject to the same permit terms. It would create an unfair economic advantage if United were not also subject to these terms so this is not a sufficient argument that the limits are unreasonable.

DISCUSSION

Burden of Proof /Standard of Review

- ¶49. United has the burden to demonstrate by a preponderance of the evidence that the disputed Permit terms are unreasonable or unnecessary. Wis. Stat. § 283.63(1), Wis. Admin. Code § NR 2.13(3)(b) and § HA 1.17(2). In other words, United must show by the greater weight of the credible evidence and to a reasonable certainty that the disputed terms are unreasonable and unnecessary. *Kuehn v. Kuehn*, 11 Wis. 2d 15, 28, 104 N.W.2d 138 (1960). United bears the same burden of proof on disputed facts.
- ¶50. Neither party has a burden as to the application of a statute and regulations to undisputed facts. Daimler Chrysler v. Labor and Industry Review Commission (LIRC), 2007 WI 15, ¶10, 299 Wis. 2d 1. However, an agency's interpretation of its own rules or regulations is controlling unless "plainly erroneous or inconsistent with the regulations." Id, ¶11. The standard was also stated as "a court will sustain an agency's reasonable conclusions of law." Department of Revenue v. Menasha Corp, 2008 WI 88 ¶¶ 53-54, 311 Wis. 2d 579. This is referred to as "controlling weight deference." Wis. Stat. § 227.57(5) provides that the "court shall set aside or modify the agency action if it finds that the agency has erroneously interpreted a provision of the law." This "controlling weight" standard is similar to the "great weight" deference an agency is given in interpretation of its statutes. Both levels of deference "turn on whether the agency's

interpretation is reasonable and consistent with the meaning or purpose of the regulation or statute. *Daimler*, 2007 WI 15 ¶20 (*citing Marder v. Bd. of Regents of the Univ. of Wis. Sys.*, 2004 WI App. 177, ¶27 n.3, 276 Wis. 2d 186, 687 N.W.2d 832 (further citations omitted)).

¶51. With respect to the question of the Department's authority, a court is "not bound by an agency's decisions that concern the scope of its own power..." Wis. Citizens Concerned from Cranes and Doves v. WDNR, 2004 WI App. 103, ¶¶ 11, 270 Wis. 2d 318, 677 N.W.2d 612, Rock-Koshkongon Lake Dist. v. WDNR, 2013 WI 14, ¶61, 350 Wis. 2d 45, 833 N.W.2d 800. Thus, no deference is due or given to the Department's evaluation of whether the statutes and regulations grant them the authority to require the contested Permit terms. "Controlling weight" deference is given to the Department's other interpretations of its statutes and regulations.

Department's Authority Generally

- ¶52. The Department was granted broad authority in Wis. Stat. § 283.001(2) which reads: "the purpose of this chapter is to grant the DNR all authority necessary to establish, administer and maintain a state pollutant discharge elimination system…" Further, under Wis. Stat. § 238.31(1) any discharge of a pollutant is prohibited except as authorized in a WPDES Permit. Pursuant to Wis. Stat. § 283.31(3) the Department may issue a WPDES permit allowing for the discharge of pollutants "…upon condition that such discharges will meet all the following, whenever applicable:
 - (a) Effluent limitations.

... (d) Any more stringent limitations, including those:

- 1. Necessary to meet federal or state water quality standards, or schedules of compliance established by the department; or
- 2. Necessary to comply with any applicable federal law or regulation; or
- 3. Necessary to avoid exceeding total maximum daily loads established pursuant to a continuing planning process developed under s. 283.83.
- (f) Groundwater protection standards established under ch. 160. (emphasis added)

Wis. Stat. § 283.31(4) continues with [t]he department shall proscribe conditions for permits issued under this section to assure compliance with the requirements of sub (3).

- ¶53. In 2011 the legislature enacted Wis. Stat. § 227.10(2m) which states that "no agency may implement or enforce any standard, requirement or threshold, including as a term or condition of any license issued by the agency, unless that standard, requirement or threshold is explicitly required or explicitly permitted by statute or by a rule promulgated in accordance with this subchapter."
- ¶54. To the extent there is a conflict between these two statutes, "it is well settled that where

two conflicting statues apply to the same subject, the more specific controls." *State ex rel. Hensley v. Endicott*, 2001 WI 105, ¶19, 283 Wis. 2d 649, 618 N.W.2d 245 (citing *Jones v. State*, 226 Wis. 2d 565, 576, 594 N.W.2d 739 (1999).

- ¶55. No controlling court has published a decision in Wisconsin specifically addressing how Wis. Stat. § 227.10(2m) interacts with Wis. Stat. Ch. 283. However, the Department has explicit authority under its governing administrative rules in this case and it was not necessary to consider in detail how Act 21 should be read in context with Ch. 283. As a recent circuit court wrote however, [t]he WPDES program is a responsibility delegated to Wisconsin by the Environmental Protection Agency (EPA) under the Federal Clean Water Act (CWA) ... DNR must issue WPDES permits with specifications that ensure compliance with the CWA." Clean Wisconsin, Inc. et al. v DNR (Kinnard Farms Inc. as Intervenor), Dane County, Case No. 15CV2633, July 14, 2016.
- ¶56. A significant issue in this case is whether the provisions of Wis. Admin Code Ch. NR 214 and NR 204 apply to United's waste or only the provisions of NR 204. Ch. NR 204 is titled and applies to Domestic Sewage Sludge Management and Ch. NR 214 is titled and applies to Land Treatment of Industrial Liquid Wastes, By-Product Solids. United handles and land applies approximately 97% industrial waste and less than 3% domestic sewage sludge (municipal sludge).
- ¶57. This dispute arises due to language within § NR 204.02(1)(a) that states "In general, this chapter applies to the following: ... 2. The quantity and quality of sludge (municipal) that is applied to land or landfilled. This includes sludge (municipal) which is combined with another material. The other material may include industrial sludge, other municipal sludge, septage, manure or any material used for mixing..." (parentheses added) United argues that because of this language, Ch. NR 204 and only Ch. NR 204 applies to its waste. This is not the correct interpretation.
- ¶58. Statutory and regulatory interpretation "begins with the language of the statute or administrative rule. State ex rel. Kalal v. Circuit Court of Dane County, 2004 WI 58, ¶45, 271 Wis. 2d 633, 681 N.W.2d 110, Wisconsin Dept. of Revenue (WDOR) v. Menasha Corp., 2008 WI 88, ¶63 (the rules of statutory interpretation apply to regulations.) "Statutory language is given its common, ordinary, and accepted meaning, except that technical or specially-defined words or phrases are given their technical or special definitional meaning." Kalal, 2004 WI 58, ¶45. The context and structure of the regulation is important so that the language is not read "in isolation but as part of a whole, in relation to the language of surrounding or closely related statutes; and reasonably to avoid absurd or unreasonable results. Id., ¶46. Reasonable effect should be given to each word.

- ¶59. "If this process of analysis yields a plain, clear statutory meaning, then there is no ambiguity and the statute is applied according to this ascertainment of the meaning." *Id. citing Bruno v. Milwaukee County*, 2003 WI 28, 260 Wis. 2d 633, ¶ 20, 660 N.W.2d 656. "Statutory interpretation involves the ascertainment of meaning, not the search for ambiguity." *Id.* Under this analysis, the meaning of Wis. Admin. Code Ch. 204 is that it applies to WPDES permits for generators and disposers of domestic sewage sludge, even when it is mixed with another type of waste. Chapter 204 does not include a statement that it is the exclusive chapter for regulating waste that is mixed with another type of waste.
- ¶60. Interpreting Ch. NR 204 as the exclusive chapter regulating United's mixed waste leads to an unreasonable or absurd result in context of the purpose of the WPDES regulatory scheme because it would obviously fail to protect waters of the state from contaminants found in 97% of waste handled by United. The WPDES regulatory process is to create a permitting system that allows for discharge of certain pollutants upon condition that the pollutant discharges do not result in contamination of "waters of the state." Wis. Stat. §§ 283.001 and 283.31. Contamination would arise if the discharged pollutants were to exceed federal or state water quality standards or groundwater protection standards.
- ¶61. Many of the monitoring and discharge limits enacted in the administrative code that govern the WPDES program (Wis. Admin. Code Chs. 200-299) are specific to the type of material being handled that the contaminants associated with that material. For example, the pesticide manufacturing industry (Ch. NR 233) has different monitoring and discharge limits than the leather tanning industry (Ch. NR 252) because the types of potential pollutants present in these industries is different. The administrative code governing the WPDES program is focused on identifying and regulating an industry based on what pollutants are associated that with industry and limiting discharge of those pollutants to the waters of the state.
- ¶62. United is a waste hauling and disposal company that primarily handles industrial waste disposed of by land application. The vast majority of the pollutants present in its waste are those associated with industrial processes identified in Wis. Admin. Code § 214.02(1). The Department's expert witnesses testified in pre-hearing testimony that the pollutants present in that industrial waste do not change because there is some incidental mixing with municipal waste. Instead, when industrial waste is mixed with municipal waste it adds pollutants to waste mixture. The higher the component of industrial waste present in a mixed waste the higher the concentration will be of pollutants associated with industrial waste.
- ¶63. Certain types of wastes are excluded from the provisions of Wis. Admin. Code Ch. NR 214,⁵ the mixed waste handled by United is not one of those excluded wastes. "Sludge from publicly or privately owned wastewater treatment works" as listed in § NR 214.02(3)(i) is

⁵ A list of those wastes is provided in § NR 214.02(3).

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intended to exempt municipal sewage sludge that is treated at a wastewater treatment facility and discharged by that facility and not to sewage sludge that is hauled away and later land applied as part of a mixture with Industrial Waste. As explained by DNR expert witness Fred Hegeman, municipal sewage treatment facilities have rigorous waste treatment procedures involving biological, chemical and physical processes which separate solids or semi-solid material from liquids. These treatment processes are not performed on the mixed waste that ULWR stores and later land applies. As a result, the Permit requires monitoring and limits for pollutants that would otherwise be treated at a municipal sewage treatment facility.

- Even if Wis. Admin. Code Ch. 204 was the only chapter that applied to United's waste after it mixes that waste with even a trace amount of municipal or other waste (as United argued) the Department is explicitly required or permitted to require the monitoring and discharge limitations at issue in United's Permit within several sections of NR Ch. 204. First, NR 204.06 "Reporting and monitoring requirements" is explicitly concerned with monitoring appropriate to the waste composition as shown in the third line "The department may modify the reporting requirements in the permit, based on the size and complexity of the permittee's land application program, changes in the quantity or quality of industrial components ..." Second, under NR 204.06(2)(a) Characteristics Report "... If a permittee generates more than one type of sludge, each sludge type shall be sampled and analyzed in accordance with the WPDES permit." (emphasis added) Third, NR § 204.06(2)(b) states that "A representative sample of the sludge shall be analyzed by the permittee as specified in the permit, for any or all of the following parameters, depending on the treatment facility size, processes used for treatment, methods of beneficial use or disposal and characteristics of industrial discharges to the treatment facility ... (9) Any other parameters which the department determines may be present in the sludge and which may result in detrimental effects to public health or the environment.. "Fourth, under NR § 204.07 Land application of sludge (8)(f) Application Rates "The department may, on a caseby-case basis in the permit, require additional monitoring and limit the land application of sludge containing pollutants that may result in environmental degradation or threaten public health."
- ¶65. If relying solely on the explicitly permissible provision of Wis. Admin Code Ch. NR 204 as a basis for the disputed Permit conditions, it only makes sense that the Department would look to Ch. NR 214 for what monitoring and land application limits must be included. Nearly all of United's land applied waste is "industrial waste" of the kind specifically associated with the processes enumerated in Wis. Admin. Code § NR 214.02(1) ("Applicability. Wastes Regulated").
- ¶66. Wis. Admin. Code Ch. NR 204 explicitly permit additional monitoring and limits on the land application of sludge containing pollutants that may result in detrimental effects to public health or the environment. Wis. Admin. Code §§ NR 204.06, 204.06(2)(a), 204.06(2)(b)9., and 204.07. There is nothing implied in this direct grant of authority.

- ¶67. The cases and opinions cited by United have persuasive value but are not controlling authority and as addressed briefly above, one recent circuit court decision is in disagreement. Most significantly, these cases are not directly on point because in this case the Department can cite beyond the authority granted in Wis. Stat. Ch. 283 to specific and explicit sections of the administrative code. A brief outline of the cases cited by United follows.
- ¶68. First, United referenced the Office of the Attorney General of Wisconsin's recent opinion regarding its interpretation of the Wisconsin Supreme Court's holding in *Lake Beulah Management District v. DNR*. OAG-01-16; 2011 WI 54, 355 Wis. 2d 47, 799 N.W.2d 73. The *Lake Beulah* case involved high-capacity wells and the Department's authority to impose monitoring conditions and require a cumulative impact evaluation for high capacity well permits under Wis. Stat. Ch. 281, the public trust doctrine⁶ or any other statutory provision. Unlike the situation with United, the Wisconsin Statutes and Administrative Code in effect at the time of *Lake Beulah's* application for a high capacity well permit were entirely silent on monitoring conditions and consideration of cumulative impacts during the permit review and approval. The court relied on the public trust doctrine and the DNR's duty under Wis. Stat. §§ 281.12, 281.34 and 281.35 (2005-06) to authorize these considerations. That is entirely different than the situation here where the DNR has explicit authority under Wis. Admin. Code Chs. NR 204 and NR 214 to require the monitoring and loading limits in United's Permit.
- ¶69. Second, New Chester Dairy LLC v. Wisconsin DNR, et al., concerns the Department's authority to impose off-site monitoring wells to evaluate the impact of a high-capacity well. Outagamie County, Case No. 14-CV-001055 (Dec. 2, 2015). As in Lake Beulah the statutes and administrative code in effect in 2012 when the application was submitted were entirely silent on installing monitoring wells to evaluate the impact of high-capacity wells. The only specific section cited by the respondent as authority for the wells was Wis. Admin Code § NR 812.09 which pertained to well and heat exchange drill holes and not high-capacity wells. That is not the situation for United's Permit.
- ¶70. Next, Kinnard Farms, Inc. is very similar to New Chester Dairy and Lake Beulah in that it involved permit terms that were nowhere specifically authorized in the relevant statutes or code. DHA Case No. IH-12-071 (Oct. 2014). The administrative law judge (ALJ) approved conditions in the permit for (1) a limitation of the number of animal units and (2) a requirement for at least two off-site monitoring wells. In a letter dated August 18, 2015 the Office of the Attorney General opined that the relevant statutes and administrative code was entirely silent on the DNR's authority to impose these conditions and thus the DNR did not have explicit authority to include them. The DNR adopted this position in September 2015 but a Dane County Circuit Court recently reversed the decision of the DNR and remanded the matter to the Department

⁶ Wis. Const. art. IX, § 1.

with direction to implement DHA's October 2014 decision that found the DNR did have authority. Case No. 15CV2633, July 14, 2016.

¶71. Finally, a Dodge County case involving United (*Town of Clyman v. United Liquid Waste Recycling, et al*, Dodge County Case No. 08CF591 (Jan. 9, 2005)) is somewhat on-point but it only addressed whether Wis. Admin. Code ch. 204 applied to United's waste. The court held that NR Ch. 204 did apply to United's industrial waste mixed with municipal waste but it did not address whether Wis. Admin. Code ch. NR 214 also applied.

United's Wis. Stat. § 283.11(2) Argument

¶72. United's argument that the chloride and COD monitoring requirements and the chloride loading limits violate Wis. Stat. § 283.11(2) is not persuasive. The argument is that the provisions of 40 CFR Part 503 regulate the same waste and thus, the DNR cannot impose standards that exceed those in 40 CFR Part 503.

The stated purpose of 40 CFR § 503.01(a) is

- (1) This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.
- (2) In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.
- (b) Applicability. (1) This part applies to any person who prepares sewage sludge, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner/operator of a surface disposal site.
- (2) This part applies to sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.
- (3) This part applies to the exit gas from a sewage sludge incinerator stack.
- (4) This part applies to land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator.

Sewage sludge is defined by 40 CFR § 503.9 (w):

- (w) Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. (emphasis added)
- ¶73. United focused on the phrase "and a material derived from sewage sludge" and argued that this included industrial waste mixed with sewage sludge. This argument ignores the meaning of "derive(d)" which in relation to chemistry means "to produce or obtain (a compound) from another substance by chemical reaction." *The American Heritage Dictionary, Second College Edition*. It also is defined as "to take, receive or obtain especially from a specified source" or "to obtain (a chemical substance) actually or theoretically from a parent source." *Merriam-Webster Online Dictionary*, full definition. The industrial waste present in United's waste is not "derived" from the sewage sludge mixed with it. They have different sources sewage sludge is generated during the treatment of domestic sewage and industrial waste is produced by industrial processes -and as such they are regulated separately.
- ¶74. Where the federal government has chosen not to regulate and the permit conditions are intended to protect ground water quality, the DNR may institute its own standards. *Maple Leaf Farms, Inc. v. State DNR*, 247 Wis.2d 96, 633 N.W. 2d 720 (Ct. App. 2001) There is no federal regulatory scheme for land application of industrial waste or industrial waste comingled with sewage sludge whereas Wisconsin has clearly promulgated rules to regulate this practice.

Unlawful Rule Making Claim

¶75. United does not contend that either Ch. NR 204 or Ch. NR 214 was unlawfully promulgated. Instead it argues that the Department's stated policy in the October 2007 White Paper constitutes unlawful rule-making. The policy at issue is "if there is land application of a combination of wastes, the most restrictive of applicable regulations are typically imposed." On a separate page of the White Paper under the heading Contract Land Application, it reads:

The WPDES permits for Contractors handling only industrial wastes are based on the applicable sections of NR 214. The permits place restrictions on the sites which may be used and limit the nitrogen, chloride, and hydraulic loading. If municipal bio-solids are co-mingled with the industrial wastes, restrictions and limits based on NR 204 are also included. If there are any bio-solids in a mixture, the entire mixture must conform with the requirements of NR 204. The more restrictive requirements of NR 214 or NR 204 are controlling.

¶76. The Wisconsin Supreme Court addressed what constitutes an administrative rule in *Wisconsin Electric Power Co.*, v. DNR, 96 Wis.2d 222, 231, 287 N.W. 2d 113 (1980) as

follows:.

"(3) 'Rule' means a regulation, standard, statement of policy or general order (including the amendment or repeal of any of the foregoing), of general application and having the effect of law, issued by an agency to implement, interpret or make specific legislation enforced or administered by such agency or to govern the organization or procedure of such agency."

In addition, sec. 227.01(4), Stats. 1973 (presently sec. 227.01(10)), provides:

"(4) Every statement of general policy and every interpretation of a statute specifically adopted by an agency to govern its enforcement or administration of legislation shall be issued by it and filed as a rule. The fact that a statement of policy or an interpretation of a statute is made in the decision of a case or in an agency decision upon or disposition of a particular matter as applied to a specific set of facts involved does not render the same a rule within sub. (3) or constitute specific adoption thereof by the agency so as to be required to be issued and filed as provided in this subsection."

Thus, a rule for purposes of ch. 227, Stats., is (1) a regulation, standard, statement of policy or general order, (2) of general application, (3) having the effect of law, (4) issued by an agency, (5) to implement, interpret or make specific legislation enforced or administered by said agency as to govern the interpretation or procedure of such agency. Citizens for Sensible Zoning, Inc. v. DNR, 90 Wis.2d 804, 814, 280 N.W.2d 702 (1979).

- ¶77. Unlike *Wisconsin Electric*, the Department has not uniformly imposed the more restrictive standard of NR 204 or NR 214 to waste haulers. 93 Wis.2d 234 (1980). Several other WPDES permits for waste haulers who also land apply industrial and municipal wastes are included in the record. Examination of those permits reveals that of the six identified by United in its Table, two have a standard for nitrogen loading, three have a limit for chloride application, five have a monitoring requirement for chloride and two have a monitoring requirement for chemical oxygen demand (COD). Thus the Department has not universally applied the stated policy included in the White Paper. There is also no specific information included in the record about how the wastes handled at these other permitted facilities differ from that of United or in what mixed proportion the wastes are typically landapplied (i.e. at a 50%-%50 ratio or 30%-%70).
- ¶78. I agree that if the Department were applying the White Paper policy statement exactly as it is written and without any consideration of the site specific wastes handled and in what proportions, it would constitute unlawful rule-making. However that is not what the testimony or the record of WPDES permits issued demonstrates. Further, the remedy if the Department's policy did constitute unlawful rule-making as applied to United's Permit would be to disregard the Department's stated policy and evaluate whether the Permit conditions are reasonable and necessary as applied to United without that policy. *Cholvin v. Wisconsin Department of Health and Family Services (WDHFS)*, 2008 WI App. 127, ¶¶ 34-35, 313 Wis. 2d 749, 758 N.W.2d 118.

CONCLUSIONS OF LAW

- ¶79. The Division of Hearings and Appeals has the authority to hear contested cases and enter necessary orders relating to WPDES Permit disputes pursuant to Wis. Stat. §§ 227.43(1)(b), 283.63 and Wis. Admin Code § NR 2.155(6).
- ¶80. The Department is explicitly authorized by the relevant administrative code to include the disputed terms in United's Permit.
- ¶81. The Department is not prohibited by Wis. Stat. § 283.11 from including the chloride and COD permit requirements. There is no federal regulatory scheme for land application of industrial waste or industrial waste comingled with sewage sludge whereas Wisconsin has clearly promulgated rules to regulate this practice.
- ¶82. The Department is not barred from including the disputed terms due to unlawful rulemaking.
- ¶83. The parties stipulated or agreed that an administrative law judge (ALJ) cannot decide or grant relief on United's equal protection arguments. United has made a record of its equal protection claims for any possible future review or claims.
- ¶84. Specific conclusions of law as to the presented issues are discussed below.

Issue #1 - Nitrogen Loading Limits at Outfalls 30, 51, 101-103 and 110-111

- ¶85. In its Post Hearing Reply Brief, United wrote that '...it does not take issue with that loading limit. Rather, the scope of its dispute is with use of TKN to limit the nitrogen." This decision is thus limited to whether using the total Kjeldahl nitrogen (TKN) analytical method and results to determine United's nitrogen loading limits is authorized and reasonable. TKN is listed in Wis. Admin. Code NR Ch. 219 (Analytical Test Methods and Procedures) which is incorporated by reference § NR 214.09(2) and NR 204.06(2)(d)2. United did not present testimony about what other method of analysis would be appropriate as an alternative to TKN and the Department is explicitly permitted to require the nitrogen loading limit under Wis. Admin. Code §§ NR 214.17(4)(d)9., 214.17(4)(e)6. and 204.07(8)(a) and (f).
- ¶86. In absence of any testimony from United regarding which method should be used alternatively to calculate whether it is in compliance with the nitrogen loading limits, it has not proven that the TKN values are unreasonable or unnecessary. The Department did demonstrate that it is highly likely United's waste at these Outfalls contains high amounts of nitrogen, that nitrogen applied to soil will be converted to nitrate form, nitrate it is very soluble and mobile in groundwater, and it can result in potentially significant health effects. Nitrogen has a published

groundwater standard in Wis. Admin. Code Ch. NR 140 and high levels of nitrogen in drinking water are a public health concern.

Issue #2 - Nitrogen Requirement at Outfall 221

- ¶87. Outfall 221 in section 3.3.11.10 is a sampling point for Class A municipal bio-solids. Per the Permit, this is a sampling point for municipal waste only and is not yet activated or in-use. The Department is explicitly required or explicitly permitted to require nitrogen loading limits for municipal sludge under Wis. Admin. Code §§ NR 204.07(8)(a) and (f). However, Section 3.3.11.10 is titled "Annual Site Nitrogen Loading" and directs United to a heading that does not specifically exist in the Standard Requirements section of the Permit. (emphasis added) Section 3.3.11.10 states "[f]or details on nitrogen loading requirements ... see the "Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges paragraph in the Standard Requirements section of this permit." Under the Standard Requirements section (Section 5.0), there is no heading that exactly matches that wording.
- ¶88. There is no apparent reason in the record why the Department would require compliance with Section 5.3.10.2 rather than 5.3.10.1 for a Class A municipal bio-solids sampling point. The Department testimony was that municipal bio-solids are generally subjected to multiple phases of treatment which stabilizes the waste and that the nitrogen concentrations and type of nitrogen in the municipal waste is generally consistent,
- ¶89. In its Closing Brief, the Department argued that the "nitrogen monitoring requirement for Outfall 221 is reasonable and necessary (Issue 2)" but it is the loading limit and not the monitoring requirements that are at issue in 3.3.11.10. In the absence of any apparent reason in the record for requiring nitrogen loading limits at a municipal waste Outfall and testimony that supports using the standard mineralization rate, United demonstrated by a preponderance of the evidence that it is unreasonable or unnecessary to apply industrial or mixed waste loading limit in Section 5.3.10.2 of the Permit. Section 3.3.11.10 should be amended to cite to Section 5.3.10.1 of the Permit.

Issues #3-#4 Chloride Monitoring and Loading Limits at Outfalls 30, 51, 101-103 and 110-111

¶90. Each of the contested permit terms related to the chloride monitoring and loading limit is for an Outfall where industrial and municipal waste are mixed prior to sampling and landspreading. The Department is explicitly permitted or required to include the chloride loading limit under Wis. Admin. Code § NR 214.17(4)(d)(7) which states "the total pounds of chloride applied shall be limited to 170 pounds per acre per year or 340 pounds per acre per 2 year

period." Chloride monitoring is further explicitly permitted under Wis. Admin. Code §§ NR 214.17(5) and 204.06(2)(b)9.

- ¶91. United did not demonstrate by a preponderance of the evidence that the chloride monitoring and loading limits are unreasonable or unnecessary. Chloride has published groundwater standards in Wis. Admin. Code Ch. 140. Nearly 97% of the waste handled and land applied by United is industrial waste and chloride is routinely found in industrial wastes. The Department presented expert testimony that United's clients, including cheese producers, meat processors, a soy sauce producer and egg producers, contribute significant concentrations of chloride to United's waste. Analytical results from United's clients show chloride levels above the preventative action limit (PAL) and enforcement standard (ES) in Wis. Admin. Code Ch. 140 and without loading limits chloride may contaminate groundwater below the land application fields. The Wisconsin legislature enacted these standards and United's argument that chloride is not a "public health risk" but only a "quality" (taste, color and odor) issue, is a collateral attack on the rules that goes beyond the scope of this hearing and Division's jurisdiction.
- ¶92. United focused on peripheral issues including local water quality data that was incomplete, not a scientific sampling and that included data favoring the Department's position where exceedances of the water quality standards for chloride were shown. (Exhibit 64A) The information from Seneca Foods was not persuasive in that it involved a different type of disposal system (spray irrigation) and again showed that chloride has exceeded the water quality standards in monitoring wells at Seneca. The Department successfully refuted United's additional arguments and data with testimony from highly qualified personnel familiar with the regulations and United's facilities.

Issue #5 Chemical Oxygen Demand (COD) Monitoring at Outfalls 30 and 101-103

- ¶93. Each of the contested permit terms related to the COD monitoring is for an Outfall where industrial and municipal wastes are mixed prior to sampling and landspreading. Monitoring for Biological Oxygen Demand (BOD₅) is explicitly permitted under Wis. Admin. Code § 214.17(5)(b), § 204.06(2)(b)1. and 9. and § 204.06(2)(d)2. which incorporates Wis. Admin Code Ch. 219 by reference. Although COD is not a listed analytical method in Ch. NR 219, COD is a less expensive and less involved test that reports much the same information. United does not object to substituting COD for BOD₅ monitoring.
- ¶94. United did not demonstrate by a preponderance of the evidence that COD monitoring is unreasonable. Levels of COD can alter the movement of pollutants in the subsurface. Low available oxygen in the waste can result in mobilization of naturally occurring substances in soil and rock when it is land applied, causing substances such as iron, arsenic to leach to groundwater. This can create a public health risk and a risk to groundwater contamination.

Issue #6 pH Monitoring at Outfalls 30, 51 101-103, 110-113 and 220

¶95. United withdrew its argument the Department is not authorized to require pH monitoring at the contested Outfalls. United did not prove by a preponderance of the evidence that the pH monitoring requirements are unreasonable. Certain pollutants in the subsurface will behave differently depending on the pH of the waste. Metals can be taken up by plants when the pH drops and this is a public health concern.

Issue #7 Metals Monitoring at Outfalls 50 and 109

¶96. Outfalls 50 and 109 The metals monitoring requirements on industrial cake sludge waste at Outfalls 50 and 109 is explicitly permitted or required under Wis. Admin Code § NR 214.08(5)(b) and United failed to demonstrate that metals monitoring was unreasonable. Metals can be taken up by plants and then eaten by humans or animals creating a public health concern. Metals can also leach into groundwater after being landspread if present in United's industrial cake sludge waste. Each of the metals to be tested has a corresponding public health related groundwater standard under Wis. Admin. Code § NR 140 (Table 1) Arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium and zinc all have an enforcement standard (ES) and preventative action limit (PAL).

Issue #8 Compliance Maintenance Annual Reporting (CMAR)

¶97. United did not contest the Department authority to include the Compliance Maintenance Reporting (CMAR) requirements in its Permit. Its argument that the CMAR is unreasonable is that it is duplicative to data already submitted by United. However, CMAR is a tool to review the previous year's practices, to identify shortcomings and to determine how past performance may affect the future such as changing the Land Application Management Plan to reflect lessons learned. United failed to demonstrate by a preponderance of the evidence that without the CMAR, it has a procedure for reviewing the year's practices, identify shortcomings or determine how to better proceed in the future. In 2015 United estimates that it handled approximately 50,000,000 gallons of wastewater. That wastewater includes contaminants that can negatively impact waters of the state and public health. United subject to only three of eight possible sections of the CMAR and it did not prove that this is an unreasonable or unnecessary demand.

Issue #9 Bypass Restrictions and Reporting

¶98. The bypass restrictions and reporting requirements in 5.2.2 and 5.2.3 of the Permit are included to address a proposed wastewater treatment plant that is not currently operational but that United could begin operating during the Permit term. Bypass restrictions and reporting are

explicitly required under Wis. Admin. Code § 205.07(1)(u) in all WPDES permits where a wastewater treatment plan is operating in order to mitigate environmental harm, prevent loss of life, personal injury or severe property damage. United did not show by a preponderance of the evidence that it has processes in place to prevent this harm or damage once its wastewater treatment plant begins operating.

Issue #10 Restrictions on Certain Fields to a Single Municipal Client

¶99. Under Wis. Admin Code § NR 204.06(7) the permittee "shall submit the following information for each site or field utilized during the reporting period: ... (c) the amount of available nitrogen applied in pounds per acre...(d) the amount of each of the parameters listed in Table 1 (metals)... applied on an annual basis and the cumulative metal loadings to the site. (word added)" Wis. Admin. Code § NR 204.07(6) has further requirements and lifetime limitations on the cumulative loading of metals on any field or site. Department witnesses testified that the only practicable way to monitor and thus report the cumulative loading of metals and nitrogen is to limit a permitted facility to allowing one municipal client's waste per field over a period of years. Further, the Department is explicitly permitted to "...limit the land application of sludge containing pollutants that may result in environmental degradation or threaten public health." Wis. Admin. Code § 207.07(8)(f). Restricting land application of municipal sludge to a single field per client is a "limit on the land application of sludge..." and it was addressed above that both metals and nitrogen are pollutants that may result in environmental degradation or threaten public health.

¶100. United did not present evidence that there was another means to satisfy the requirements of Wis. Admin Code Ch. 204 or otherwise demonstrate by a preponderance of the evidence that the restrictions at issue in #10 were unreasonable.

ORDER

WHEREFORE IT IS HEREBY ORDERED that the Wisconsin Department of Natural Resources shall amend Section 3.3.11.10 of United Liquid Waste Recycling, Inc.'s WPDES Permit (effective July 1, 2014 until June 30, 2019) to reflect the annual site nitrogen loading requirements under Wis. Admin. Code Ch. 204.

IT IS HEREBY FURTHER ORDERED that United Liquid Waste Recycling, Inc. shall comply with the remainder of the disputed WPDES Permit terms addressed herein immediately, or within a period otherwise agreed upon with the Wisconsin Department of Natural Resources,.

Dated at Madison, Wisconsin on this 21st day of July, 2016.

STATE OF WISCONSIN
DIVISION OF HEARINGS AND APPEALS

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Rebecca J. Vahle

Administrative Law Judge

NOTICE

Set out below is a list of alternative methods available to persons who may desire to obtain review of the attached decision of the Administrative Law Judge. This notice is provided to insure compliance with Wis. Stat. § 227.48 and sets out the rights of any party to this proceeding to petition for rehearing and administrative or judicial review of an adverse decision.

- 1. Any party to this proceeding adversely affected by the decision attached hereto has the right within twenty (20) days after entry of the decision, to petition the secretary of the Department of Natural Resources for review of the decision as provided by Wisconsin Administrative Code NR 2.20. A petition for review under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.
- 2. Any person aggrieved by the attached order may within twenty (20) days after service of such order or decision file with the Division of Hearings and Appeals a written petition for rehearing pursuant to Wis. Stat. § 227.49. Rehearing may only be granted for those reasons set out in Wis. Stat. § 227.49(3). A petition under this section is not a prerequisite for judicial review under Wis. Stat. §§ 227.52 and 227.53.
- 3. Any person aggrieved by the attached decision which adversely affects the substantial interests of such person by action or inaction, affirmative or negative in form is entitled to judicial review by filing a petition therefore in accordance with the provisions of Wis. Stat. §§ 227.52 and 227.53. Said petition must be served and filed within thirty (30) days after service of the agency decision sought to be reviewed. If a rehearing is requested as noted in paragraph (2) above, any party seeking judicial review shall serve and file a petition for review within thirty (30) days after service of the order disposing of the rehearing application or within thirty (30) days after final disposition by operation of law. Since the decision of the Administrative Law Judge in the attached order is by law a decision of the Department of Natural Resources, any petition for judicial review shall name the Department of Natural Resources as the respondent and shall be served upon the Secretary of the Department either personally or by certified mail at: 101 South Webster Street, P. O. Box 7921, Madison, WI 53707-7921. Persons desiring to file for judicial review are advised to closely examine all provisions of Wis. Stat. §§ 227.52 and 227.53, to insure strict compliance with all its requirements.